

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017787**Date Inspected:** 15-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:****CWI Present:****Yes No****Inspected CWI report:** **Yes No N/A****Rod Oven in Use:** **Yes No N/A****Electrode to specification:** **Yes No N/A****Weld Procedures Followed:** **Yes No N/A****Qualified Welders:** **Yes No N/A****Verified Joint Fit-up:** **Yes No N/A****Approved Drawings:** **Yes No N/A****Approved WPS:** **Yes No N/A****Delayed / Cancelled:** **Yes No N/A****Bridge No:** 34-0006**Component:** Trial Assembly, Tower Bay**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Christopher D'souza was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhen Hua Port Machinery Company (ZPMC) at Chang Xing Island in Shanghai, China. QA Inspector observed and/or found the following:

CWR Verifications

Trial Assembly (Base Metal Repair)

B-CWR 1958 Rev 0

This QA Inspector was notified via email for verification of B – CWR1958 R0 at 0800 hours the following was observed:

- The component for verification was identified as LD CB13/14
- Weld repair was to be performed on location where temporary attachments were removed and base metal was damaged on CB13 and CB14
- ZPMC QC Li Yang was present on site to direct and record all repair work.
- WPS to be used for repair was WPS-345-SMAW-1G(1F)- Repair-1, WPS-345-SMAW-2G(2F)- Repair-1, WPS-345-SMAW-3G(3F)- Repair-1

B-CWR 2045 Rev 1

This QA Inspector was notified via email for verification of B – CWR2045 R1 at 0900 hours the following was observed:

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- The component for verification was identified as SEG064A-043 (10CE field splice BP to SP @ E4)
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- ZPMC QC Liu Hua Jie was present on site to direct and record all repair work.
- WPS to be used for repair was WPS-345-SMAW-1G(1F)-Repair-1 and WPS-345-SMAW-4G(4F)-Repair-1

B-CWR 2046 Rev 1

This QA Inspector was notified via email for verification of B – CWR2046 R1 at 0900 hours the following was observed:

- The component for verification was identified as SEG064A-044 (10CE field splice BP to SP @ E3)
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- ZPMC QC Liu Hua Jie was present on site to direct and record all repair work.
- WPS to be used for repair was WPS-345-SMAW-1G(1F)-Repair-1 and WPS-345-SMAW-4G(4F)-Repair-1

Bay 19

B-CWR 2048 Rev 0

This QA Inspector was notified via email for verification of B – CWR2048 R0 at 1500 hours the following was observed:

- The component for verification was identified as SB021-092-004
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- This location was repaired more than twice
- ZPMC QC Xu Tao was present on site to direct and record all repair work.
- WPS to be used for repair was WPS-345-FCAW-2G(2F)-Repair-1

B-CWR 2049 Rev 0

This QA Inspector was notified via email for verification of B – CWR2049 R0 at 1500 hours the following was observed:

- The component for verification was identified as SB017-088-004
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- This location was repaired more than twice
- ZPMC QC Xu Tao was present on site to direct and record all repair work.
- WPS to be used for repair was WPS-345-FCAW-2G(2F)-Repair-1

B-CWR 2050 Rev 0

This QA Inspector was notified via email for verification of B – CWR2050 R0 at 1500 hours the following was observed:

- The component for verification was identified as SB017-086-004
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- This location was repaired more than twice

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- ZPMC QC Xu Tao was present on site to direct and record all repair work.
- WPS to be used for repair was WPS-345-FCAW-2G(2F)-Repair-1

B-CWR 2051 Rev 0

This QA Inspector was notified via email for verification of B – CWR2051 R0 at 1500 hours the following was observed:

- The component for verification was identified as SB018-092-004
- Weld repair was to be performed on location where rejectable indication was observed during Ultrasonic Testing (UT)
- This location was repaired more than twice
- ZPMC QC Xu Tao was present on site to direct and record all repair work.
- WPS to be used for repair was WPS-345-FCAW-2G(2F)-Repair-1

NDT - UT

Bay 10 (Tower)

This QA Inspector performed Ultrasonic Testing (UT) of East Tower Lift 5 grillage welds D-E corner weld ESD1-TI5-2B-F-23, 41. UT was performed on 25% of the middle section (Compression zone) in accordance with AWS D1.5-2002, section 6, table 6.4. No Rejectable indications were observed at the time of testing. These Indications were recorded and plotted for further evaluation.

This QA Inspector performed Ultrasonic Testing (UT) of North Tower Lift 5 grillage welds D-E corner weld SSD1-TI5-1B-F-22, 53. UT was performed on 25% of the middle section (Compression zone) in accordance with AWS D1.5-2002, section 6, table 6.4. No Rejectable indications were observed at the time of testing. These Indications were recorded and plotted for further evaluation.

This QA Inspector performed Ultrasonic Testing (UT) of South Tower Lift 5 grillage welds D-E corner weld NSD1-TL5-3B-F-2, 36. UT was performed on 25% of the middle section (Compression zone) in accordance with AWS D1.5-2002, section 6, table 6.4. No Rejectable indications were observed at the time of testing. These Indications were recorded and plotted for further evaluation.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Dsouza,Christopher

Quality Assurance Inspector

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Reviewed By: Carreon,Albert

QA Reviewer